

Project Proposal

The UpLift Project



*C - C++
Tech
Stack*



Team - 06

Mentor – Moderator Detail

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Learning Process

1. We have divided our whole learning process into two segments, the segment division is as follows :
 - a. Learning Process
 - b. Project Development
2. The learning process phase will primarily focus on complete learning of C - C++ programming language from very basic to advance level.
3. Moving towards the project process segment, all what students would acknowledge they would implement on their own in the project segment.
4. For every week we have a margined certain syllabus to cover, every week a target will be fixed to attain and almost 3 - 4 online sessions will be conducted based on participants convenience for scheduling classes.
5. Assignments have been the topmost priority. Based on this fact, we will provide 3 assignments every week to students from basic to intermediate and advance for overall acknowledgement of students. The assignments will be pushed on Git. A specific repository will be created to submit assignments and their marking up will be complete hands on.
6. The whole process will be marked on a weak basis by mentors overviewed by moderator and their details will be availed to The UpLift Team anytime.

Timeline For Program : Weekly Targets

<p>Week 1</p> <ul style="list-style-type: none"> • Getting Started with C/C++ • Data Handling • Operators and Expressions 	<ol style="list-style-type: none"> 1. Introduction 2. C - C ++ Character Set 3. Tokens (Lexical Units) 4. Basic Intro To Programming Language 5. I/O Operators 6. Data Types 7. Variables 8. Operators and Expressions 9. Assignment Statement 10. Shorthands 11. Code Execution
<p>Week 2</p> <ul style="list-style-type: none"> • Flow Of Control 	<ol style="list-style-type: none"> 1. Introduction 2. Statements 3. Statement Flow Control 4. Selection Statement 5. Iteration Statement 6. Jump Statement
<p>Week 3</p> <ul style="list-style-type: none"> • Function • Function Overloading 	<ol style="list-style-type: none"> 1. Introduction 2. Function Statistics 3. Types Of Functions 4. Function Definition 5. Access - Return From Function 6. Scope Rules 7. Parameter And Return Type Of Function 8. Inbuilt Libraries 9. Function Overloading 10. Calling Overloaded Functions
<p>Week 4</p> <ul style="list-style-type: none"> • Classes • Objects 	<ol style="list-style-type: none"> 1. Introduction 2. Classes 3. Data Handling And Encapsulation 4. Functions In A Class 5. Using Objects 6. Static Class Member
<p>Week 5</p> <ul style="list-style-type: none"> • Constructors • Destructors 	<ol style="list-style-type: none"> 1. Introduction 2. Constructors 3. Destructors
<p>Week 6</p> <ul style="list-style-type: none"> • Data File Handling 	<ol style="list-style-type: none"> 1. Introduction 2. fstream.h Header File 3. Data Files 4. Opening - Closing Files 5. Steps To Process File In Program 6. Changing Behaviour Of Stream 7. Sequential I.O With Files 8. Detecting EOF 9. File Pointers And Random Access

	10. Basic Operation On Binary File 11. Error Handling During File I/O
Week 7 <ul style="list-style-type: none"> Pointers 	1. Introduction 2. Memory Mapping 3. Free Store 4. Declaration And Initialization Of Pointers 5. Dynamic Allocation Operators 6. Pointers And Const 7. Pointers And Function 8. Objects As Function Arguments 9. Pointers And Objects
Week 8 <ul style="list-style-type: none"> Array Structure 	1. Introduction 2. Need Of Array And Structure 3. Array Initialization 4. Calling Function With Array 5. 1 Dimensional And 2 Dimensional Array 6. Operations On Array 7. Referencing Structure Elements 8. Nested Structure 9. Passing Structure To Function 10. User Defined Data Types And #Define Preprocessors 11. Array And Structure 12. Pointer And Array 13. Pointer And Structure
Week 9 <ul style="list-style-type: none"> Linked List Stack Queue 	1. Introduction 2. Linked Listed 3. Stack 4. Queue 5. Implementation

Project Description

Title : Student Details Management System

Domain : Education

Basic Idea

A project development that will mark-up all the students details like

1. Attendance
2. Marks
3. Activities Enrolled By Student
4. Details Of Students
5. Record Maintenance, including a few more.

A complete project created from scratch of basic to advance level.